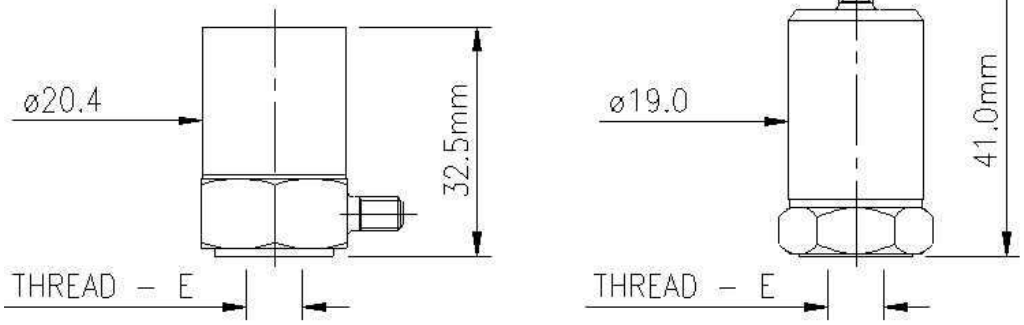
TECHNICAL INFORMATION

PREDICTIVE MAINTENANCE SYSTEMS

SENSONICS LTD

PZP2 ACCELEROMETER



- GENERAL PURPOSE
- 100pc/g OUTPUT
- 200°C OPERATION
- STAINLESS STEEL HERMETICALLY SEALED CASE
- FREQUENCY RANGE 2.0Hz TO 9KHz
- RADIATION RESISTANT OPTION

The PZP2 transducer is of conventional piezo-electrical principal and has a high signal output and high temperature capability. It is intended for use as a vibration detector in conjunction with an external impedance matching or charge amplifier.

The piezo-electric sensor is contained within a robust, sealed, stainless steel case having a solid base with single hole fixing. The top of the accelerometer id fitted with a stainless steel Microdot connector for the single output. The sensitive axis of the transducer is coincident with the longitudinal axis of the cylindrical body form.

The robust construction of the accelerometer makes it particularly useful as a general purpose or light industrial transducer for use in applications requiring a high signal output and/or a high temperature operating ability.

The PZP2 transducer range has been developed for use in nuclear environments and avoids the use of materials which are unsuitable for high radiation environments.

PZP2 ACCELEROMETER

SPECIFICATION

Charge Sensitivity (Q) .....100pC/g ±10% (others available)
Cross axis Sensitivity .....Less than 4%
Dynamic Range.....Up to 300g peak
Frequency Range .....3Hz to 11KHz (better than 3dB)
Resonant frequency 23KHz
Amplitude linearity .....+/- 1% or better
Transducer capacitance (Ct) 1000pf
Cable capacitance (Cc) .....30pf/ft (typ.)

$$\text{NB. Voltage Sensitivity} = \frac{Q}{Ct + Cc}$$

Insulation Resistance (at 20°C) 30G.ohms
Operating temperature .....-40°C to +200°C
Survival temperature .....-40°C to +250°C
Temperature coefficient of charge sensitivity .....0.08% per °C @ 200°C
Temperature coefficient of voltage sensitivity .....0.07% per °C @ 200°C
Radiation resistance .....1 x 10_9 RADS GAMMA
Weight.....72 gms (nominal)

Environmental

Protection (BS.EN60529).....Sealed to IP.66/IP.67

ORDERING INFORMATION

	A	B			C	D	E
PZP2 -	1						0

A Electrical Configuration

1 - 2 wire, non-isolated direct charge o/p

B Connection Method

8 G 1 Top exit, Microdot co-axial connector, 10/32UNF

8 G 2 Side exit, Microdot co-axial connector, 10/32UNF

C Output & Frequency band (3dB point)

1 100pC/g ±10% @ 80Hz

2 90pC/g ±10% @ 80Hz

D Mounting Thread (Female)

1 - ¼ UNF

2 - M5

3 - M6

4 - 2BA

E Hazardous Area Approval

0 - Non Intrinsic

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